GENERIC NAME: **SODIUM BICARBONATE 8.4%**
112.25

BRAND NAME: Sodium Bicarbonate 8.4%
CLASS: buffer

Mechanism of Action:

Buffers H^+ and increases pH

Indications and Field Use:

Pre-existing metabolic acidosis
Overdose of aspirin, cyclic antidepressants (alkalinization of blood)
Cardiac arrest after other interventions and ventilation is adequate

Contraindications:

Alkalosis

Adverse Reactions:

CV: Congestive heart failure, edema secondary to sodium overload.
Metabolic: Hyperosmolarity, metabolic alkalosis, hypernatremia, in cardiac arrest may cause extracellular alkalosis and intracellular acidosis.

NOTES ON ADMINISTRATION

Incompatibilities/Drug Interactions:

Incompatible with other drug infusions

Adult Dosage:

Pre-existing Metabolic Acidosis or Alkalinization of Blood: 50-100 mEq IV per medical control authority.
Infusion: 50 mEq of sodium bicarbonate/250 ml of NS or as determined by medical control.
Cardiac arrest: First dose usually 1 mEq/kg (or as determined by blood gas analysis), with subsequent doses of 0.5 mEq/kg every 10 minutes in cardiac arrest after other standard treatment (defibrillation, CPR, intubation, ventilation and more than one trial of epinephrine) has been used.

Pediatric Dosage:

1 mEq/kg IV or IO slowly, if ventilation is adequate according to medical control authority. Can contribute to acidosis and cause fluid overload.

Neonatal Dosage:

1 mEq/kg IV or IO of 4.2% slowly. Waste 25 ml of 8.4% solution and add 25 ml of NS from IV bag, each ml will contain 0.5 mEq of sodium bicarbonate

Routes of Administration:

IV bolus; IV infusion
For IV infusion to be monitored on interfacility transports, infusion pump is required

Onset of Action:

Seconds

Peak Effects:

1-2 minutes

Duration of Action:

10 minutes

Dosage Forms/Packaging:

50 mEq/50 ml prefilled syringes

Arizona Drug Box Supply Range:

PARAMEDIC: 2 - 3 prefilled syringes

INTERMEDIATE: 2 - 3 prefilled syringes

Special Notes:

> Flush tubing before and after administration, **especially** with concurrent use of calcium chloride.
> Sodium bicarbonate administration should be considered only for treatment of documented severe acidosis associated with prolonged cardiac arrest or an unstable hemodynamic state, hyperkalemia or certain overdoses (i.e. cyclic antidepressants, ASA, phenobarbital, etc.).
> In premature infants hyperosmolarity from undiluted sodium bicarbonate has been correlated with an increased risk for periventricular-intraventricular hemorrhage.
> **Severe** tissue necrosis will occur with extravasation.